

**Centrifuge modeling:**

The team, using both the US Army Centrifuge at the U.S. Army Engineer Research and Development Center and Rensselaer Polytechnic Institute's Geotechnical Centrifuge Research Center, has completed three centrifuge models, one of the 17th Street Canal east levee and two of the London Avenue Canal west levee. Our plan is to complete a second model of 17th Street Canal east levee, two models of the London Avenue Canal east levee, and one model of the Orleans Canal levee. Each model takes approximately seven days to construct, instrument, and prepare for testing. The models are all 1:50 scale and tested at 50 times the earth's normal gravity. The time to spin up from 1 gravity to 50 gravities (1 to 50 g's) takes several hours. This is done slowly so as not to overstress the model prior to applying the flood load. Once at 50 gravities, the model is subjected to the flood load and allowed to respond accordingly. This event takes approximately five minutes.